ABSTRACT OF THE DISCLOSURE

In the present invention, a plurality of carriers in a multi-carrier DMT communication system is grouped into one or multiple carrier groups according to at least one carriergroup parameter. A carriergroup parameter defines a parameter relating to each carrier group rather than to individual carriers, and is used for receiving and transmitting messages or data using the carrier group or groups. In one embodiment of the present invention, multiple carrier groups of fixed-size are determined and the worst case signal-to-noise ratio for each carrier group is used for the carriergroup parameter for that specified carrier group. In another embodiment of the present invention, multiple carrier groups of variable-size are determined based on a carriergroup parameter such as a carriergroup bitloading parameter. The carriergroup bitloading parameter and the worst case carriergroup SNR parameter for each carrier group are used to define each carrier group for transmitting and receiving messages or data.